

Draft 2081 Application
For the Authorized Incidental Take of Desert Tortoise (*Gopherus agassizii*)
From the Proposed 314.6 Acre Joshua Tree Recreational Campground Site in the
Community of Joshua Tree, San Bernardino County, California

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Executive Summary

JAT Associates, Inc. (Proponent) plans to develop an eco-friendly recreational campground on a 314.6-acre site in Joshua Tree, California, that will improve the environment and the local community. The planned development will restore and protect 300.8 acres of land that has for many years been abused by illegal activities including but not limited to target shooting, dumping and off road vehicle use (OHV). This will be achieved by situating the proposed buildings and pathways on a carefully delineated 13.8-acre portion of the site that specifically avoids the areas of higher-density tortoise sign to the greatest extent practicable. This careful design was achieved with the direct input of Circle Mountain Biological Consultants (CMBC) and representatives of California Department of Fish and Game (CDFG) and United States Fish and Wildlife Service (USFWS). The original project design was completely reworked with their inputs. The project will be built in two phases. Phase I will comprise approximately 62% of the total project. The campground will be in operation for 3 to 5 years before Phase II construction begins.

The Proponent has already implemented numerous mitigation measures to minimize potential impacts to the desert tortoise, including but not limited to, scaling back the project size, redesigning the project to avoid tortoise sign, relocating specific structures and so forth. The Proponent further proposes to implement measures to minimize potential impacts during construction and operation, additional measures to mitigate potential impacts, and post-construction measures to minimize residual and indirect potential impacts. To *minimize potential impacts* to the desert tortoise and its habitat the Proponent will, among other things, provide on-site biological monitoring during construction, including pre-construction surveys; conduct conservation awareness programs; appoint a field contact representative to oversee compliance; and meet a schedule of reporting requirements. Additionally, the Proponent will implement measures to protect tortoises from potential impacts related to campground development and operation.

It should be noted that the campground construction and operation areas have been specifically designed to be outside of the identified areas of higher-density tortoise sign. This will ensure that 300.8 acres of moderately to severely impacted potential habitat will be restored and protected. The Proponent has chosen to preserve over 95% of the land as part of the project design. Essentially, less than 4.4% of the land will be developed. This ratio of developed to preserved lands is an unprecedented 1:21.8, far in excess of the normally acceptable mitigation ratio of 1:1. This outcome is the direct result of the collaborative efforts of USFWS, CDFG, CMBC and the Proponent and creates the unique opportunity to provide a more significant and much greater land compensation than the traditional land compensation purchase requirement. Furthermore, any redesign or modification of the project as proposed, would require a full review and written approval by USFWS and CDFG, per San Bernardino County law.

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1.0 INTRODUCTION AND BACKGROUND

2.4 Overview/Background

JAT Associates (Proponent) plans a small (4.4% site coverage), low-impact and eco-friendly campground/resort supporting art and educational, entertainment and recreational activities (the project). Through the use of ecologically sensitive design and “green” building technologies as well as wildlife educational training and materials, the project will provide a unique opportunity for employees, guests and the community to experience the natural desert surroundings while respecting its delicate balance. By rehabilitating the terribly degraded and abused 314.6-acre parcel, the project will heighten public awareness for the threatened desert tortoise and preserve and protect over 300 acres of potential habitat for the species. The Proponent has already implemented numerous mitigation measures to minimize potential impacts to the desert tortoise, including but not limited to, scaling back the project size, redesigning the project to avoid tortoise sign, relocating specific structures and so forth. The Proponent further proposes to implement measures to minimize potential impacts during construction and operation, additional measures to mitigate potential impacts, and post-construction measures to minimize residual and indirect potential impacts.

Notwithstanding the fact that the project will improve the status quo for the listed species, nevertheless, the Proponent requests issuance of a 2081 incidental take permit (ITP) from the California Department of Fish & Game (CDFG). The permit will authorize incidental take of the State and federally listed, threatened desert tortoise (*Gopherus agassizii*) from 13.8 acres of potential habitat in the Morongo Basin portion of the West Mojave Desert.

2.1 Project Location

The 314.6-acre site (APN: 605-151-03) is located in San Bernardino County, California, in the community of Joshua Tree. (See Figure 3 in Appendix A.) The site is located immediately north of Sunflower Road, between Sunever and Rice Roads, and includes parts of Bunker Mountain. Elevations on the site range from 744 m to 831 m (2,440 to 2,720 feet), with Bunker Mountain rising to the northwest from an alluvial flat at its base.

Importantly, not all of the 314.6 acres is proposed for development. The Proponent estimates that new buildings, roadways, trails, and parking areas would

directly impact no more than 13.8 acres on the subject property (See Figures 2 and 4, revised proposed site plans in Appendix A). The Proponent's original development plans (see Figure 1 original site plan in Appendix A) were significantly scaled down and modified in October 2003, to realize mitigation measures, pursuant and in response to recommendations made by Becky Jones of CDFG. Roadways and facilities locations were rearranged to be located outside of areas of higher-density sign and to take advantage of existing areas of disturbance, such as roadways and heavily destroyed cove areas. Further changes and adjustments were made to the plans in August of 2004 following a collaborative meeting attended by CDFG, U.S. Fish & Wildlife Service (USFWS), Circle Mountain Biological Consultants (CMBC), Bill Warner of Warner Engineering and the Proponent. In general, the proposed development was reduced in size and relocated into areas of the site that did not contain tortoise sign while incorporating additional minimization and mitigation efforts such as a comprehensive fencing strategy, the use of culverts and additional building relocations, among others.

2.2 Permit Duration

This Agreement shall become effective on the date that CDFG issues the permit requested and shall remain in full force and effect for the period of thirty (30) years or until termination of the permit, whichever occurs first. Three years prior to the end of the term, the Proponent will have the option to submit a written request to extend the permit for an additional 10-year term. CDFG will have the opportunity to evaluate the effectiveness of the permit, the performance of the Proponent and make any necessary changes prior to granting the 10-year renewal permit. CDFG will guarantee issuance of the renewal permit provided the Proponent has properly implemented all of the conditions of the original permit. CDFG will provide the Proponent with written notice of the renewal/denial not less than one year prior to the end of the 30-year term. Additional 10-year renewal permits would be granted in the same manner. With many assurances provided for by monitoring and reporting and an adaptive management strategy, the 30-year term of this ITP is both appropriate and responsive to the requirements for successfully financing and developing the project. The ability to renew the permit would guarantee that the necessary care, monitoring and protection of the tortoises would continue in perpetuity.

2.3 Other Permits Required

The Federal Endangered Species Act of 1973, as Amended ("Act"), requires all federal agencies to consider listed species in their planning efforts and to take positive actions to further the conservation of these species. Section 9 of the Act prohibits any taking of a listed species. Section 10 of the Act allows the USFWS to approve exceptions to the federal prohibitions against take of a listed species. In the 1982 amendments to the Act, Congress established a provision in Section 10 that allows the "incidental take" of an endangered and threatened species of wildlife by non-Federal entities. "Incidental take" is defined as take that is "incidental to, and not the purpose of,

the carrying out of an otherwise lawful activity.” Under section 10 of the Act, the applicant for an “incidental take permit” is required to submit a habitat conservation plan (HCP) to USFWS that specifies, among other things, the impacts that are likely to result from the taking, and the measures the permit applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. The Proponent has worked closely with USFWS to develop a comprehensive HCP and has submitted the document with the application for issuance of a section 10(a)(1)(B) ITP.

2.4 CEQA

The County of San Bernardino, Land Use Services Department, Current Planning Division is the local agency responsible for identifying the significant environmental impacts for “projects” seeking their approval. A project is an activity that must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

The Proponent has submitted applications with the County of San Bernardino for a General Plan Amendment (GPA) and Planned Development (PD), which are project and site specific. During a meeting on April 31, 2005, attended by Abel Villarreal and John Simpson of JAT Associates, Bill Warner of Warner Engineering, Bill Adams, Carrie Hyke and Patrick Egle of the San Bernardino County Planning Division, to review the scope and layout of the project, a mitigated negative declaration was considered to be the most appropriate determination for the project. A final determination will be made upon further review and documentation will be provided. The contact information for the CEQA lead agency is:

County of San Bernardino, Land Use Services Department
Current Planning Division
385 N. Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182
Phone: (909) 387-4131
Fax: (909) 387-3294
Contacts: William Adams, Supervising Planner
Carrie Hyke, Senior Associate Planner
Patrick Egle, Planner

2.0 BIOLOGICAL ANALYSIS

2.4 Biological Consultant Qualifications

CMBC is a uniquely qualified consulting firm having conducted the original field studies for the Proponent in 2003 (Circle Mountain Biological Consultants 2003), and having previously completed numerous HCPs for the desert tortoise (see Section 4.0). Three of these HCPs have resulted in issuance of 10(a)(1)(B) permits. These three included the first (Tierra Madre Consultants 1993), second (Tierra Madre Consultants, Inc. 1994), and fourth (Circle Mountain Biological Consultants 1997a) permits authorizing the incidental take of tortoises in California. Between 1998 and 2004, Ed LaRue, one of the Principals of CMBC, served as the Bureau of Land Management's wildlife biologist on the West Mojave Plan, which set up the framework for incidental take and conservation of tortoises throughout the 14,600 square mile planning area (U.S. Bureau of Land Management 2003). The Proponent's conservation strategy is based, in part, on these and other documents listed in Section 4.0 (i.e., particularly Circle Mountain Biological Consultants 2004).

2.4 Species To Be Covered

Authorized incidental take is being sought for the desert tortoise (*Gopherus agassizii*). The California Fish and Game Commission listed the desert tortoise as threatened in 1989. The USFWS listed the desert tortoise as threatened on April 2, 1990.

2.4 Project Description

The Proponent plans a campground/resort supporting recreational facilities. The project will be built in two phases. Phase I will constitute approximately 62% of the total project, and will be comprised of 11 private TP tent campsites, therapeutic salt water pools, a fitness center, massage treatment rooms and a reception/restaurant building. The campground will be in operation for 3 to 5 years before Phase II construction begins. Phase II will be comprised of 11 additional private TP tent sites, a bunkhouse for additional lodging, expansion of the spa area, a photo studio, stables, an outdoor theater, a general store, a meeting hall, a dining room, a photo gallery, ranger's station, maintenance buildings, and a greenhouse. Table 1 provides acreage for various components of the two phases.

Table 1. Impact Acreage Associated with the Proposed Project

| |
|---|
| Total Building Area |
| Phase I: 51,971 sq. ft. |
| Phase II: 90,332 sq. ft. |
| Total: 142,303 sq. ft. |
| Total Roads, Trails and Parking Area |
| Phase I: 324,400 sq. ft. |
| Phase II: 135,600 sq. ft. |
| Total: 460,000 sq. ft. |
| Percentage of site to be developed |
| Buildings: 1.04% (3.27 acres) |
| Roads, Trails & Parking: 3.36% (10.56 acres)* |
| Total: 4.4% (13.83 acres) |

*This acreage is larger than anticipated since roads and trails will follow existing tracks where possible.

Importantly, site plans were significantly scaled down and modified following an October 2003 meeting on-site with Sharon Dougherty of CMBC, Proponent, and Becky Jones of CDFG. In response to that meeting, roads and trails were relocated out of washes, the main access road was realigned with an existing road to minimize impacts, and campground facilities were relocated to places that are already significantly degraded by dumping, shooting, and other illegal activities. For the most part, these areas were devoid of vegetation and tortoise sign and are so degraded that the habitat is marginal, at best. Further modifications were made following the August 2004 meeting in Pasadena, where additional minimization and mitigation efforts were explored and implemented into the plans.

At completion of Phase II, the Proponent anticipates a maximum of 200 persons on-site, including employees and guests. The projected daily average for Phase I is 75 persons, and for Phase II is 150 persons. Vehicle use will be restricted to the main entrance road leading to the parking area. Trail use within the campground will be limited to pedestrians, electric golf carts, mountain bikes, horses, and by service and emergency response vehicles, when necessary.

All impacts of the proposed project that are covered by the 2081 permit will be restricted to the 314.6-acre subject property. Coverage is not sought for any pipelines, reservoirs, or other ancillary facilities that would be located outside the subject property. Construction activities will be phased, so that about 62% of the impact will occur during Phase I development following permit issuance. The remaining portions of the site will be developed in three to five years, depending on several factors (for phasing see Appendix A, Figure 4). Proponent anticipates that not more than 13.8 acres will be developed for campground construction and operation. Please note that these 13.8 acres were carefully delineated with the aid of USFWS and CDFG as areas devoid of vegetation and tortoise sign and are so degraded that the habitat is marginal, at best. The covered activities include:

Activities associated with construction of Phase I and II of facility:

Earthmoving – surveying, clearing, digging, trenching, grading, berming, watering for dust control, etc.

Heavy Equipment Use – tractors, jackhammers, compactors, delivery trucks, cranes, etc.

Construction – installing fencing, erecting buildings, storing/transporting/using of equipment and materials, workers arriving/departing parking areas by car, moving tortoises out of harms way, etc.

Activities associated with ongoing use and maintenance of facility:

Staff – maintenance/emergency vehicle operation, monitoring/patrolling by foot/bicycle/horse/golf cart, arriving/departing parking lot by car, truck deliveries, refuse and re-cycling collection/sorting/storing/removal, washing/cleaning/repairing/operating of machines and equipment, repairs and maintenance of landscaping/roads/trails/fences/buildings/grounds, etc.

Guests – walking, hiking, bicycling, horse back riding, golf cart operation, exercising, swimming, dining, taking classes, photography, shopping, spa services, attending a performance or event, etc.

Enhancement and Long-term Management of Undeveloped Land:

Land Rehabilitation – collecting/sorting/storing/transporting debris, sandblasting graffiti from boulders, planting/clearing vegetation, etc.

Monitoring – patrolling, data collection, reporting, etc.

Maintenance – fence/trail/road repairs, culvert and vertical mulching maintenance, raven control activities, etc.

The Proponent anticipates potentially having a well on the site to accommodate some of their water needs.

2.3 Extent Of Take

The Proponent is seeking the issuance of a 2081 permit that would authorize the eventual development of up to 13.8 acres of lands adjacent to potentially occupied tortoise habitat. Although very unlikely, desert tortoises could be inadvertently killed if protective measures are not implemented; unauthorized “take” would be in violation of Section 2050 of the California Fish and Game Code (CESA). According to the survey conducted in 2003, 6 live tortoises were identified on the property. However, none were located on the 13.8 acres to be developed. While the current number of tortoises is unknown, it is likely to be similar or less, based on current trends in the area and the fact that severely destructive activities continue to occur on the site.

It is likely that no tortoises will be handled or accidentally killed during authorized activities. However, as a contingency, the Proponent asks that the take limits be: (a) not more than thirty-one tortoises may be captured and relocated and (b) not more than four tortoises accidentally killed or injured during the permit term. For subsequent

10-year permit renewals, take limits would be: (a) not more than eleven tortoises captured and relocated and (b) not more than two tortoises accidentally killed or injured during each additional 10-year permit term.

As a minimization measure, an approved biologist will be called upon to move a tortoise (if absolutely necessary) out of harm's way to avoid harm or mortality to the individual animal. This measure is not expected to result in jeopardy of the species and we anticipate that the benefits will outweigh any adverse effects to the species. There have been cases where a single "problem" tortoise has been handled on numerous occasions so that the stated harassment limit was in danger of being reached. In such cases the biologist has chosen not to handle subsequent tortoise(s) because the proponent is nearing the harassment limit for the project, when in fact the tortoise(s) should have been moved from harm's way. The Proponent therefore asks that CDFG authorize unlimited harassment or set the harassment limit sufficiently high to ensure that the project is not subject to unnecessary delays during which time formal discussion with CDFG would need to occur.

If the incidental mortality take limit identified in the permit is met, all construction activities shall cease and the Proponent shall meet with CDFG to discuss the reasons for take and modify the measures as necessary to avoid any additional take. Under no circumstances shall the take limit be exceeded without prior approval of CDFG.

Most importantly, there are some clear *beneficial impacts* associated with site development. As documented in CMBC (2003), there are extensive areas of illegal dumping, shooting, and recreational vehicle activity. With the assistance of CMBC, USFWS, and CDFG, the Proponent redesigned the project to situate developed areas where direct and indirect impacts would be negligible. The remainder of the site (300.8-acres) will be cleaned up, restored and protected forever. All destructive and illegal activities that have been occurring will be eliminated. The project will serve as a model for thoughtful eco-sensitive development in an environmentally abused and unprotected area. The Proponent will also introduce an extensive educational program designed to inform its employees and guests regarding the desert tortoise and the protection of its habitat. Additionally, San Bernardino County law insures that the project as described herein could not be altered or modified without written approval from USFWS and CDFG.

2.4 Impact On The Species

On a regional scale, *direct impacts* of campground construction are considered minimal to tortoise conservation and recovery. The subject property is not found within regional conservation areas that have been identified as essential to the survival of the species. It is located approximately 15 miles west of the Pinto Mountain Critical Habitat Unit, which was delineated in 1994 by USFWS (U.S. Fish and Wildlife Service 1994b). Nor is the site found within any conservation areas identified in the Draft Environmental Impact Report/Statement for the West Mojave Plan (U.S. Bureau of Land Management

2003). Rather, the subject property is found within the Incidental Take Area identified for San Bernardino County in the West Mojave Plan.

On a local scale, the campground is proximate to existing, single-family residential development in the Copper Mountain Mesa area. However, fragmented habitats in the Copper Mountain Mesa area still support relatively good numbers of tortoises (Circle Mountain Biological Consultants 1997b, U.S. Bureau of Land Management 2003). During the 2003 survey, CMBC found 6 tortoises, 37 burrows, and more than 250 fresh and older scat (see Figure 2 in Circle Mountain Biological Consultants 2003, Appendix B). The sign was mostly distributed on a southwest-northeast axis through the flatter portions of the site, where tortoises are somewhat more vulnerable than those in mountainous areas.

Importantly, in October 2003 in response to input from CDFG (Becky Jones), the Proponent modified the development footprint to minimize and mitigate direct impacts to tortoises. This resulted in situating development along several existing roads and in areas where dumping and on-going habitat degradation are prevalent. Further modifications were made to the plans to include additional minimization and mitigation efforts following the August 2004 meeting in Pasadena.

If the entire, 314.6-acre site were developed, based on CMBC's 2003 survey information, construction would affect at least six adult tortoises, and possibly two or more subadult animals, and an unknown number of juvenile tortoises, based on sign found on the property. However, development will be limited to approximately 13.8 acres in areas where existing disturbance has already marginalized tortoise habitats. As such, direct impacts to tortoises will likely be negligible.

Native biological resources would be removed from construction areas where pad sites are graded, roadways are built, etc., which are examples of direct impacts. *Indirect impacts* are those adverse effects that could occur after phased construction is complete. One of the main differences between direct and indirect impacts, then, is the timing of the impact; direct impacts occur at the time of construction, whereas indirect impacts usually occur well into the future following completion of phased construction.

Foreseeable *indirect impacts* include introduction of domestic pets into the natural environment, use of adjacent areas by people who may collect tortoises and other wildlife, etc. Operating a new campground in the area may attract more ravens if new food and water sources are created. These ravens may become opportunistic predators on young tortoises occurring on undeveloped portions of the site and in adjacent areas. All of these potential impacts have been considered and thoughtful resolutions have been implemented into the operating policies of the project. While well-behaved dogs will be allowed to enter and stay at the facility, owners are required to maintain them on a leash when outside of their (tortoise-impermeable) fenced campsites. With the introduction of more people to the area of the campsite, the use of signage in key locations (i.e., parking lot, perimeter fence line, at each campsite) provides a unique opportunity to heighten tortoise awareness. In addition, wildlife training for all staff members and construction

workers and a variety of wildlife educational materials made available to guests will help to create an atmosphere of respect for wildlife that is ultimately the key to their survival. Raven occurrences will be monitored regularly. The Proponent will utilize low to the ground lighting and all together avoid light polls, which could serve as raven perch locations. If necessary, Proponent will obtain salvage permits to allow for raven removal.

There has been a recent increase in the number of discretionary permits being solicited in the Morongo Basin from the Town of Yucca Valley, City of Twentynine Palms, and San Bernardino County. Out-of-state developers and several that normally operate in Palm Springs have recently entered the Morongo Basin to plan for residential development that would otherwise be considerably more expensive if located in the Coachella Valley, for example. Between April and October 2004, CMBC surveyed more than 2,600 acres in the Morongo Basin, including 900 acres in Twentynine Palms and the remaining 1,700 acres in Yucca Valley. Between 1990 when the tortoise was listed and 2003, CMBC surveyed 16 different sites in the Twentynine Palms area. In only one year, during 2004, CMBC surveyed 12 additional sites in and adjacent to the city.

The *cumulative impacts* of this minimally invasive project on the species favor the ongoing survival of the desert tortoise at this location that otherwise, if left vacant, would leave the tortoises vulnerable to persistent and ongoing threatening and destructive activities. Campground construction is considered to have minimal growth-inducing impacts. Rather, the campground would accommodate recreational needs of an increasing urban population in the Morongo Basin, and provide non-motorized recreational opportunities in a more structured, regulated manner. Appropriate management, implemented as envisioned, will allow for the protection of about 300 acres of potential tortoise habitat on the undeveloped portions of the site. Perimeter fencing, increased human presence, tortoise awareness programs, etc. will eliminate illegal activities that would have eventually extirpated tortoises from the site (i.e., dumping, shooting, off-road recreational vehicle activities, etc.).

2.5 Jeopardy

This project is unique in that the creation of the Joshua Tree Recreational Campground will improve the chances for survival of the species on the site. This is due to the fact that this site suffers from a long history of illegal dumping, target shooting and OHV use and these activities continue to occur today. As a result, scientific data indicates that the species is in decline at this location. This condition, in part, is due to a lack of available police protections and no other safeguards in existence. The project by design addresses and offers remedies for these threats and will have a positive impact on and create a net benefit for the species.

Tortoise survey data for the surrounding area indicates that the tortoise population in this region is in decline for a number of reasons. Contributing factors include, among others, the ongoing deleterious and destructive illegal activities previously described as well as increased development in the area. This project reduces development density for

the 314.6-acre parcel that could otherwise support over 90 homes with its current zoning. The project is designed to utilize less than 5% of the site in an environmentally sensitive manner. The remaining 95% of the site will remain as undeveloped open space that is carefully monitored and managed as a wildlife sanctuary and refuge. The project will virtually eliminate many of the known threats to the species through education, raised awareness, monitoring programs and physical safeguards (i.e. fencing, culverts, etc.).

Further, the project seeks to set an example for more socially and environmentally conscientious development in areas with fragile and sensitive resources. It is our hope that the campground will serve as a positive model and invite continued dialogue within the community about the important issues of ecological sustainability and improved conservation efforts in order to maintain a sound balance between our natural resources and the growth that the area is experiencing.

2.6 Measures To Mitigate and Minimize Impacts

While the California Code of Fish and Game sets forth the Legislature's intent to acquire lands to conserve endangered and threatened species, the law wisely anticipates that it is not always possible nor appropriate to mandate such, and accordingly, provides for permit issuance in specific cases where the event of economic, social, or other conditions makes such infeasible and where appropriate mitigation and enhancement measures are provided. The Legislature requires that the measures or alternatives required be roughly proportional in extent to any impact on the species. The Proponent here intends to go far beyond the code requirement and plans to set aside 300 acres (of the 314.6 acres owned) that will be protected, restored, enhanced and managed by the Proponent, in perpetuity, for the preservation of the resident wildlife. Accordingly, the ratio of developed to preserved lands will be an unprecedented 1:21.8, approximately 22 times the normally acceptable mitigation ratio of 1:1. This outcome is a direct result of the specific direction given by CDFG and USFWS beginning at the earliest stages of project design in order to satisfy requirements for permit issuance from both agencies. It has taken over 2 years to complete this process. Understandably this extensive mitigation is extremely costly to the Proponent and a separate land acquisition, for lands which the State has not yet identified and which would need to meet separate management requirements, would be infeasible for the Proponent both in terms of timing and cost.

Additionally, the Proponent has developed the following conservation strategy to mitigate and minimize impacts on the species by setting forth a comprehensive set of measurable biological goals, objectives with triggering thresholds and adaptive management practices that offer remedial measures. This strategy combined with the monitoring and reporting guidelines outlined in Section 2.8 below, will assure successful implementation and compliance.

Management of Indirect Threats to the Desert Tortoise on the Parcel

Goal 1: Reduce or eliminate the presence of desert tortoise predator subsidies on the parcel.

Objective 1: Eliminate raven perches at the project site and sanctuary by utilizing low to the ground lighting and perch spikes where necessary so that artificial raven perching sites are practically eliminated. This threshold is achieved when routine monitoring of raven activity documents that 80 percent of the observed raven perches are on natural features as opposed to artificial perches.

Adaptive Management: If routine monitoring documents that artificial perch sites are over the threshold, the source of the problem will be investigated by staff and the necessary repairs or upgrades to facilities will be made.

Goal 2: Reduce or eliminate the presence of litter on the parcel.

Objective 1: Maintain the parcel so that no uncontained litter is found during routine weekly monitoring of the campground.

Adaptive Management: If uncontained litter is found during daily collection cycles it would be removed and the monitor would research the source of the problem to develop and implement adaptive measures. These adaptive measures may include increasing collection cycles from campsites as well as dumpster bins so that they never reach capacity, educating staff and guests as needed about not leaving food in coolers, closed plastic containers, or bags unattended at their campsites, reinforcing unlocked trash collection sites, and providing guests with lockable pet dishes that are too heavy for a raven to lift, or which are locked to the ground.

Management of Direct Threats to the Desert Tortoise on the Parcel

Goal 3: Reduce or eliminate depredation by ravens.

Objective 1: Maintain the parcel so that no common raven nests are present at any given time. This threshold is achieved when routine monitoring observes no nests within the campground or sanctuary area.

Adaptive Management: The Proponent will obtain a qualified biologist holding USFWS migratory bird depredation permits and CDFG scientific collection permit, to allow for raven and raven nest removal.

Goal 4: Eliminate depredation by dogs.

Objective 1: Require that guests bringing a dog onto the property maintain their pet on a leash or within their tortoise-proof fenced campsite. This threshold is reached when no tortoises are harassed or harmed by a guest's dog.

Adaptive Management: If a guest intentionally or otherwise allows their dog outside of their individual tortoise-proof fenced campsite without a leash or takes their dog on a leash into the desert tortoise sanctuary area they will be asked to leave and/or be barred from returning as management

sees fit. All guests arriving with a pet will be required to sign a written statement at the time of registration, acknowledging that they are aware of the presence of desert tortoises on the site and are willing to comply with the policies regarding pets.

In the event that a tortoise is harassed or harmed by a guest's dog, an approved biologist will document and report the incident to the CDFG and additional adaptive measures will be determined between the CDFG and management so that the threshold of fewer than 4 take (mortalities) occur over the permit period of 30 years.

Goal 5: Reduce or eliminate the possibility of injury or mortality of the desert tortoise during construction and operation of the campground facility.

Objective 1: Implement minimization and avoidance measures during construction and operation of the campground facility with a threshold of having no tortoises wounded or killed.

Adaptive Management: Minimization measures include having an approved biological monitor on site during construction and an approved desert tortoise handler on call at all times during operation of the facility in the event that a desert tortoise needs to be removed from harm's way. If the threshold of one injury or death is met, or if a "problem" tortoise requires multiple incidents of removal, minimization and avoidance measures would be evaluated to determine areas of weakness and ineffectiveness. The approved biologist would initiate discussions with CDFG to develop more effective measures.

Objective 2: Eliminate mortality due to vehicle crushing by guests and staff by enforcing reduced speed limits within the campground and parking areas to 10 mph with a threshold of less than three violations documented by personnel per individual guest and less than two violations by staff members.

Adaptive Management: If personnel document that the threshold for violating the speed limit has been met by a guest, management shall deliver written notice that the subsequent violation will result in eviction and barring from the facility. If the threshold for a staff member is met, it would be documented in their personnel file and employment probation or termination could occur.

Objective 3: Use tortoise-proof fencing and signage around the access road, parking lot, and entrance gate, so that no tortoises would be injured or killed by vehicles arriving or departing from the parking lot. The speed limit along the access road would be designated at 20 mph, and employees would be given training to verbally remind departing guests to check under their vehicles before driving away.

Adaptive Management: If a tortoise is injured or killed on the access road or in the parking lot, management shall evaluate remedial measures such as installing speed bumps or altering the steepness or intervals of the speed bumps as well as improving signage and education.

Goal 6: Raise awareness of the desert tortoise for construction personnel, staff, guests and the community.

Objective 1: Utilize educational materials for all construction workers, employees, and guests of the campsite so that no tortoises will be injured or killed due to ignorance or lack of information. Staff and guests will be required to sign a statement accepting personal responsibility for understanding the information provided and fully complying with the regulations of the facility.

Adaptive Management: If the threshold were to be met, staff and/or guests would be required to accept personal responsibility and an on-call approved tortoise handler would immediately be called to document and report the incident to the CDFG. If the incident was believed to be intentional, law enforcement would be notified and responsible parties would be subject to federal and state fines, penalties and/or imprisonment. Unintentional or accidental non-compliance by staff would result in a performance review and employment probation or termination pending outcome of an investigation. Unintentional or accidental non-compliance by a guest would result in possibly being temporarily or permanently barred from the facility pending outcome of an investigation.

Management of Desert Tortoise Sanctuary

Goal 7: Stop the destructive activities presently taking place on the site that are destroying potential habitat and harming the resident tortoises (i.e., OHV use, illegal dumping, target shooting, etc.).

Objective 1: Implement security measures, such as: signage, fencing, vertical mulching and patrolling, that would reduce the possible occurrence of these activities, by maintaining a threshold of less than three trespasses or security breeches per year.

Adaptive Management: In the event that any of these activities were to occur, the breached area would be immediately repaired and attempts would be made to identify the offending subject and the incident reported to law enforcement. If occurrences exceeded the threshold, increased patrolling would be initiated and unsuccessful fortifications would be evaluated, remedied and monitored.

Goal 8: Provide and maintain a sanctuary for resident tortoises on the undeveloped 300.8 acres of the site.

Objective 1: Maintain the undeveloped portion of the site so that no more than 2% of the total area is impacted by human disturbances such as foot and horse trails.

Adaptive Management: If this area were to become larger than 2% of the undeveloped area as determined by routine surveillance and monitoring management would evaluate the sources of the problems and take remedial action such as increasing patrols to ensure that visitors stay on approved trails, closing and re-vegetating new trails, improving signage of

approved routes and/or restricting access to the undeveloped areas to only groups accompanied by a staff member.

Objective 2: Use educational materials, staff training and signage to raise tortoise awareness so that fewer than 4 tortoises, if encountered, would be harmed during the permit term of 30 years.

Adaptive Management: If the take threshold of 4 desert tortoises occurs within the permit term, and in addition to standard response measures identified above, the project proponents will notify and work with the CDFG to avoid additional take until the CDFG determines whether a permit amendment is appropriate.

Proponent estimates that not more than 13.8 acres will be affected by Phase I and II development (see Figures 2 and 4 in Appendix A). The remaining 300 acres is currently open to numerous adverse impacts, including shooting, dumping and OHV use. Through perimeter fencing and other protective measures identified in this conservation plan, tortoises will be provided safe refuge from future impacts, and more importantly over 300 acres of tortoise habitat will be restored and protected by the Proponent. This and other measures identified herein will minimize and mitigate any adverse affect on the tortoise to the maximum extent practicable.

It should be noted that the campground construction and operation areas have been specifically designed to be mostly outside of the identified habitat portion of the site. This design will ensure that 300.8 acres of moderately to severely impacted habitat will be restored and protected forever. The Proponent has chosen to develop less than 4.4% of the parcel. The ratio of developed to preserved lands is an unprecedented 1:21.8, far in excess of the normally acceptable mitigation ratio of 1:1. This outcome is the direct result of the collaborative efforts of USFWS, CDFG, CMBC and the Proponent and creates the unique opportunity to provide a more significant and much greater land compensation than the traditional land compensation purchase requirement. Furthermore, any redesign or modification of the project as proposed would require a full review and written approval by USFWS and CDFG, per San Bernardino County law.

2.7.1 Measures to Mitigate Impacts.

In coordination with CDFG, USFWS and CMBC, the Proponent has made numerous changes to the scope and design of the original plan in order to mitigate impacts to tortoises and other important resources (i.e., washes). To further enhance the mitigation strategy for the project, additional measures have been included that will better the situation for resident tortoise. All of these measures are given below *to mitigate direct impacts*:

- Relocate permanent structures to areas of no or low-density tortoise sign;
- Realign the proposed access road to correspond to an existing road;
- Relocate the entrance station out of the wash;

- Realign proposed access trails to tent sites so that they do not coincide with washes;
- Place two culverts along access road to avoid fragmentation;
- Locate tortoise-proof fencing along access road and parking lot to avoid crushing tortoises;
- Locate tortoise-proof fencing along access road close to the edge of the road in the areas that the two culverts transect the road in order to minimize the length of the culverts;
- Locate a tortoise-permeable perimeter fence and 24-hour security to eliminate illegal OHV use, dumping, shooting;
- Place 3-strand barbed wire perimeter fence in level areas, attached to rocky areas, rather than entire perimeter;
- Place signs along the perimeter and elsewhere to elevate conservation and wildlife awareness;
- Eradicate entrance roads in rocky areas by vertical mulching or other camouflage method; and
- Conserve over 300 acres of land.

2.7.2 Measures to Minimize Impacts.

The measures listed below are guidelines designed to ensure that direct impacts are minimized during the construction phases:

- Reduce size of Project from 33 Private TP campsites to 22;
- Reduce number of ancillary structures, such as one photo studio instead of three;
- Limit grading and removal of native vegetation to the minimum area necessary, not to exceed 100 feet from building footprints;
- Utilize temporary tortoise-proof fencing to preclude tortoises from impact areas;
- Restrict all vehicles, staging areas, etc. to barren areas or within fenced impact areas;
- Prohibit cross-country vehicular travel;
- Utilize biological monitors overseeing all construction activities where take is likely to occur;
- Establish and administer tortoise awareness programs to personnel prior to development;
- Bar firearms and pets on-site during construction;

- Ensure that all litter and refuse will be disposed of properly to avoid attracting tortoise predators; and
- If possible, restrict ground-disturbing activities to between November and January.

Once the site has been developed, the following measures will be implemented in perpetuity to *avoid direct impacts* associated with site operation:

- All dogs will either be restrained within tortoise-proof fenced areas or maintained on leashes;
- Wildlife educational programs and information will be provided for guests to protect wildlife and increase conservation awareness;
- All employees will receive mandatory wildlife awareness training;
- The speed limit on the main access road will be 20 mph and 10mph within the campground and parking areas;
- Excepting emergencies and maintenance, vehicle travel will be restricted to the main access road and parking lot; and
- Campsites and facilities will be accessed by foot, bicycle, horse, and golf cart only.

Finally, the Proponent will implement measures to *minimize residual and indirect impacts*:

- The following types of measures will be implemented to avoid subsidizing ravens:
 - Ensure pet food is not accessible to ravens by providing guests with raven proof, sealable food and water dishes with instructions to seal dishes when away from the campsite;
 - Ensure no new water sources are available through employee awareness training and monitoring;
 - Avoid new nesting substrates through employee awareness training and monitoring; and
 - If necessary, obtain a USFWS depredation permits and a CDFG scientific collection permits to allow for raven removal.
- Maintain records of tortoise encounters to adjust activities and modify facilities in coordination with CDFG as necessary;
- Implement monitoring program(s) for the following concerns and implement remedial actions as necessary:
 - Monitor for integrity of perimeter fence, signage and vertical mulching.

- Monitor for integrity of tortoise-proof fencing.
- Monitor for unauthorized horse and foot trails.
- Monitor for litter.
- Monitor for raven and feral dog occurrences.
- Monitor for unmanaged water sources.
- Monitor for pet compliance.
- Monitor for speed limit compliance.

The following sections identify specific measures that will be implemented by the Proponent to minimize impacts to any desert tortoises that may be found on-site and in adjacent areas during and following authorized ground disturbance. These measures will apply to the Proponent and all its authorized contractors and subcontractors involved in site development. Herein, the Proponent identifies measures to minimize all direct and indirect impacts to tortoises and occupied habitat, as follows.

2.7.3 Tortoise preconstruction survey.

Tortoises found during preconstruction surveys shall be translocated out of harm's way by the authorized biologist. Any relocated animals will be placed within the perimeter fence on portions of the subject property that are protected and not to be developed (see "Guidelines for Handling Tortoises During Construction Projects" Appendix C).

2.7.4 Permitted biological monitor.

The Proponent shall enlist a USFWS and CDFG approved biologist to perform all monitoring activities prior to and during any construction-related activities that may result in the take of tortoises. Within 30 days prior to any ground disturbing activities, the Proponent shall provide the resume(s) of the proposed biologist(s) to USFWS and CDFG. USFWS and/or CDFG must approve the biological monitor before construction begins and before the biologist begins monitoring duties. The permitted biologist shall have the authority to halt all project activity should a danger to a desert tortoise arise. The permitted biologist can then allow work to proceed after hazards to tortoises are removed and the tortoise is no longer at risk.

2.7.5 Tortoise awareness program.

Prior to any ground disturbing activities, the permitted biologist shall meet with all construction personnel to discuss the occurrence of desert tortoise on-site and the status of the species. This awareness program shall inform construction personnel of the minimization measures being implemented to protect tortoises and the importance of abiding by those measures.

The awareness program must be received, reviewed, and approved by USFWS and/or CDFG at least 30 days prior to the presentation of the program. Alternatively, a previously USFWS-approved program may be used. At a minimum, the program shall include discussion of the distribution, general behavior, and ecology of the desert tortoise, the sensitivity of the desert tortoise to human activities, the protection afforded the desert tortoise by the Endangered Species Acts, the procedures for reporting encounters with desert tortoises, and the importance of following all measures outlined in this document.

Personnel shall be informed that only permitted biologists are allowed to handle desert tortoises; construction personnel and campground staff shall not handle tortoises under any circumstances. They shall be informed that any such handling or any other form of take is not authorized, and that penalties for unauthorized take may include a \$25,000 fine and up to six months in prison.

As part of the awareness program, all workers shall have been informed to check beneath any parked vehicle immediately prior to moving the vehicle while in desert tortoise habitat outside fenced impact areas. After the tortoise-proof fence has been installed, all personal vehicles and construction equipment shall be parked inside the fenced area. Cross-country travel outside fenced areas or inside the fenced area prior to removal of tortoises shall be prohibited. If a desert tortoise is found beneath a vehicle, the permitted biologist shall be contacted to move it from harm's way. Alternatively, the vehicle shall not be moved until the desert tortoise has left of its own accord. The permitted biologist shall be responsible for taking appropriate precautions to ensure that any desert tortoise moved in this manner is not exposed to temperature extremes that could be harmful to the animal.

All trash and food items shall be promptly placed in covered receptacles within the project site to reduce the attraction of common ravens and other desert tortoise predators. Plastic garbage bags shall be placed in raven-proof containers and not left in the open, on the ground. The covered containers shall be regularly removed from the site for disposal at an authorized landfill. Water used for dust suppression shall be applied in such a manner to avoid ponding and subsequent use by ravens.

Construction personnel and other people related to the project shall maintain a 20-mile per hour speed limit on all dirt roads accessing the site. Tortoises observed along dirt access roads shall be moved only by personnel permitted to do so under the this permit.

No intentional killing, harassment, or collection of wildlife shall be allowed within or near the construction area. This measure pertains to both construction personnel and biological monitors. The only exception is if a tortoise is injured or found dead, the approved biologist will be contacted to handle the situation and CDFG will be notified. Rattlesnakes and other animals may be moved from harm's way as necessary, but will not be collected.

Construction personnel shall be informed that they are not to bring pets (except for service animals) or firearms onto the job site. The use of fireworks and other explosives

(not used for construction purposes) shall be prohibited. Proponent shall publish a written policy reflecting their goal to protect and preserve the natural balance of nature by prohibiting firearms on the property and prosecuting anyone found harming or damaging wildlife or property.

Additional minimization measures will include the distribution of: (a) highly visible stickers to be worn on hard hats to identify workers who have attended the education program; the absence of such a sticker would indicate that a worker had not attended the session, which would be rectified prior to beginning work; (b) stickers or placards reminding construction personnel to check beneath their vehicles for tortoises prior to moving the vehicle; and (c) wallet-sized cards outlining important, practical tortoise protection measures.

The Proponent shall maintain a list of all construction personnel who have attended the awareness program. Personnel shall be informed that their signature on the list indicates that they understand the minimization measures and are willing to abide by them throughout all construction activities that could harm tortoises.

All construction personnel shall be given the awareness program in a classroom setting prior to initiating construction. This measure would allow the use of an educational video, such as the one produced by NASA (National Aeronautics and Space Administration), which was expressly endorsed in September 1995 by the Ventura Field Office of USFWS. The video has proven very beneficial as a supplement to handouts and discussions. For construction personnel coming into the workplace after this initial presentation, the Proponent shall meet with each person in the field and provide them with the same information presented in the classroom, minus the video presentation.

2.7.6 Field contact representative (FCR).

The Proponent shall appoint a field contact representative (FCR) who shall be responsible for overseeing compliance with the measures outlined in this document and coordinating compliance with project subcontractors, USFWS and CDFG. The FCR shall have the authority to halt all project activities that are in violation of the measures given in this permit.

2.7.7 Report the onset of construction.

Prior to beginning construction of a given phase, the Proponent shall inform USFWS and CDFG of the area to be developed and the proposed construction date. If survey data are available, the report should indicate how many tortoises are likely to be affected by a given phase, within the prescribed take limit. The information shall be provided 30 to 45 days prior to construction to inform the agencies that the permit is being acted upon. It is not necessary for the agencies to respond for development to proceed so long as the other provisions identified in this permit are being implemented accordingly.

2.7.8 Install a tortoise-proof fence and remove tortoises.

Prior to clearing vegetation from a given phase, a tortoise-proof fence shall be erected around the perimeter of the area on which permanent facilities will be developed. Once the phase is fenced, tortoises shall be removed from the area and the fence maintained in place until construction is completed. The purpose of the fence is to preclude all tortoises from the construction impact zone, including tortoises removed from the site that may try to get back to their on-site burrow(s).

It is recommended that, if possible, temporary tortoise-proof fences be placed at least 50 feet within the perimeter of a given property line to provide a buffer zone to minimize impacts to adjacent lands. The 1" x 2" wire mesh fence would be fastened securely to posts at intervals sufficient to ensure integrity of the fence. The wire mesh shall extend at least 18 inches above the ground and 12 inches laid out at a right angle to the fence (extending away from the interior), flush with the surface of the ground or buried with soil and rock to prevent tortoises from entering the site.

The Proponent shall be responsible for maintaining the desert tortoise-proof fence throughout construction. Breaks in the fence that could allow immigration of tortoises into the construction area shall be repaired immediately. The fence shall be checked regularly and particularly after each major rainstorm to ensure that it will continue to exclude tortoises from the site. While on-site, biological monitors shall be given this responsibility as part of their normal monitoring duties.

All project-related facilities and construction-related areas, such as staging areas and personnel parking areas, shall occur within the fenced area(s). All related infrastructure (wells, water treatment, refuse transfer, developed parks, commercial development, etc.) shall also remain within the fenced area.

The construction fence shall have as part of its design either a tortoise-proof gate or a breakaway portion of fence that can be opened and closed to allow vehicle access. The gate or modified fence shall remain closed at all times during construction except to allow vehicles to enter or leave the site. This measure may be modified if the biological monitor, based on his or her surveys of surrounding areas, determines that there is little or no likelihood of tortoises entering the site through the opening. If the biologist determines that the gate may be left open and subsequently finds that a tortoise has entered the construction area through that opening, a gate or modified fence shall be installed and kept closed.

Prior to installing the fence, the biologist shall survey the area along which the fence will be installed. The fence line shall be moved when possible so that any tortoise burrows will remain on the outside of the fenced area. The biologist shall consider the direction of the burrow and know that burrows may be 30 to 40 feet long. So, not only the burrow opening, but also the burrow's end, shall be considered and excluded if the fence line is to be altered. Any tortoise burrows found within the proposed fence line that cannot be avoided shall be hand excavated by the biologist prior to clearing of the fence

line or installation of the fence. Burrow excavation procedures are given in Desert Tortoise Council (1999). The biologist shall remain on-site to monitor the installation of the fence.

After installing the fence, and before any other activities occur within the fenced area, the permitted biologist shall survey the site for tortoises. If possible, and depending on the size of the phase, the surveys shall occur immediately after installation of the fence, and several days prior to brushing or grading activities. The site shall be searched three times unless no tortoises are found on the second search. Burrows shall either be excavated as they are found or flagged for excavation later. Each burrow shall also be carefully checked for viable tortoise eggs. When found, the biologist shall have a plan for disposition of these eggs outside the impact zone, and move the eggs in such a way that the viability of the eggs is not adversely affected by their movement (Desert Tortoise Council 1999).

Prior to removing tortoises from the first phase, the Proponent shall have fenced the perimeter of the 314.6-acre site with a permeable fence (e.g., three-strand, barbed-wire). The area should provide sufficient space to ensure protection of tortoises translocated out of impact areas. The number of tortoises, dates, and other pertinent information shall be maintained for each displaced tortoise. The Proponent will likely continue to collect pertinent data on these tortoises in subsequent years. There is no requirement to provide this information to the agencies, but it will be available if requested.

The Proponent also intends to install a tortoise-proof fence and two culverts along the main access road into the site. Since this fence will have to function for a longer period of time, it will be necessary to attach the mesh to a chain-link or barbed wire fence that will withstand encroachment by motorcyclists or other off-highway vehicles. A tortoise-proof fence not attached to a more substantial fence will not likely deter human encroachment or exclude tortoises from the access road over a long period. For this long-term fence, where practical, the bottom 12 inches shall be buried rather than folded on top of the ground (as would be done for a temporary fence). The fence shall be monitored to ensure its integrity.

2.7.9 Termination of biological monitoring.

Once all tortoises have been removed from the fenced area, the biologist shall remain on-site until construction areas have been cleared of vegetation. No vegetation shall be cleared outside the fenced area. The biologist shall inspect the brushed area immediately after clearing to ensure that no tortoises were injured during brushing. Once the site has been fenced, surveyed, all tortoises removed and translocated, the vegetation cleared, and the area checked to ensure that no tortoises were injured or killed, the permitted biologist shall not be required to remain on-site as long as all other measures given herein are being implemented.

In lieu of the on-site monitor, the FCR shall be given the responsibility of ensuring compliance with the permit measures. The FCR, or appointee, shall visit the site as often as needed to check the tortoise-proof fence and ensure that other measures are being effectively carried out. Of particular importance shall be the containment of construction activities, including parked vehicles and equipment staging areas, inside the fenced area. If the FCR finds that the measures are not being implemented, the Proponent, USFWS and CDFG shall be contacted and informed of the situation. USFWS and CDFG would then determine if the monitor should resume monitoring activities on a daily basis.

If a tortoise is observed inside the fenced area after the monitor leaves, the permitted biologist shall immediately go to the site and move the tortoise into the adjacent protected area on the subject property. If tortoises are injured, they shall immediately be taken to a local veterinarian for first aid. On-site construction shall not resume until the biological monitor returns to the site, or until an approved substitute monitor is enlisted.

2.7.10 Removal of the tortoise fence and subsequent protection of tortoises.

At the completion of construction the tortoise-proof fence may be removed from the site or left in place to continue to exclude tortoises from impact areas. Fence removal would depend on the nature of construction. If all tortoises were removed at one time, a more substantial fence (or even block wall) would be required. As construction proceeds, the fence may be removed or used in part for the next development phase. If the fence is removed by heavy equipment, that activity shall be monitored. If removed by hand, a monitor need not be present. In either case, such activities should be documented in appropriate reports.

2.7.11 Follow-up measures to minimize residual and indirect impacts.

The Proponent shall implement additional measures that will continue to protect tortoises after construction is completed. As described above, the Proponent shall monitor and maintain all tortoise-proof fences. Additionally, the Proponent shall create and implement a raven-monitoring program. Among other things, the Proponent shall routinely monitor the undeveloped 300 acres of the site as part of the weekly routine campground security surveillance to determine if ravens are preying on tortoises. The monitoring program shall consider if any new facilities are subsidizing ravens with new sources of water and/or food and nesting substrates.

Campground employees and visitors shall be made aware that tortoises occur in adjacent areas and that they are protected by the Endangered Species Acts. An educational brochure providing information about the local presence of tortoises and prohibitions against off-highway vehicle activity, tortoise collection, release of pet tortoises, unleashed dogs, and other pertinent items, shall be developed and made available to campground visitors. Signs or information kiosks shall be placed at

prominent entry point(s) to provide information on tortoise conservation and minimize the impacts of the increased use of the area after it is developed.

2.7 Monitoring and Reports

2.8.1 Construction monitoring and reporting.

The Proponent shall enlist an authorized biologist(s) to monitor fencing, brushing, and other authorized construction activities that may harm the desert tortoise. The permitted biologist shall maintain a record of all desert tortoises observed and moved during project activities. This information shall include locations and dates of observations, approximate size, whether animals voided their bladders (if handled), general condition of health, any apparent injuries and state of healing, and diagnostic markings (i.e., identification numbers on marked costal scutes).

A follow-up report shall be provided to USFWS and CDFG within 90 days of completion of monitoring activities. The report shall include final determination of the acres of surface disturbance, all tortoise observation records, and an evaluation of the impacts to desert tortoises resulting from the construction activities. The report shall address the appropriateness of the conservation measures and make recommendations as to how the measures may need to be changed for construction of future phases as well as an evaluation of the objectives set forth in the enhancement effort of the undeveloped areas.

2.8.2 Procedures for removing dead and injured tortoises.

If a dead tortoise is found, the permitted biologist shall make a determination as to the cause of death. If the cause of death or injury is from construction activities, the incident(s) shall be reported as follows. Upon locating a freshly dead or injured tortoise, initial notification must be made to the Palmdale Regional Office of CDFG within three working days of its finding. If determinable, the cause of death will be documented. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification shall be sent to the USFWS (Ventura) and CDFG (Palmdale).

If an injured tortoise is found, it shall be transported to High Desert Animal Hospital in Yucca Valley for immediate evaluation and treatment. The ultimate disposition of that tortoise will depend on its recuperation from the injury and shall be determined with input from USFWS and CDFG. The Proponent shall pay all veterinary bills.

2.8.3 Monitoring for tortoise predator subsidies, threats and security breaches.

As part of the responsibilities delegated to maintenance, security and ranger personnel, a weekly checklist will be maintained detailing the specific areas of concern to be monitored, which are set forth in the Goals and Objectives section of this document.

Thresholds that are met will immediately be reported to management and in consultation with the Proponent's biologist, measures outlined in the adaptive management strategy will be taken to remedy the situation.

2.8.4 Annual wildlife agency reporting.

The Proponent will submit to USFWS and CDFG a report detailing all of the information compiled in the records of the monitoring program, including all reports of encounters with desert tortoises and their resolutions, not later than March 31 of the preceding calendar year ending December 31, or any portion thereof, during which the permit was in force. An assessment of the effectiveness of the monitoring program will be offered as well as any suggestions for improvements.

2.8 Funding

The Proponent shall pay all costs associated with implementation of this conservation plan. These costs are generally discussed in the following paragraphs.

2.9.1 Minimization and mitigation measures.

As provided by this permit, to remove tortoises from impact areas, "the site shall be searched three times unless no tortoises are found on the second search." This is a standard measure used for many USFWS/CDFG-authorized projects. It is vital that all tortoises be removed from the construction impact area to avoid reaching the take limit for the project. All tortoises occurring within the construction impact zone must be moved from harm's way. The larger the area to be surveyed, the more costly it will be to find and remove all tortoises, particularly if tortoise removal occurs during the tortoise's activity period, roughly between late February and early October.

The cost of tortoise removal will vary depending on the permitted biologist contracted by the Proponent. In general, presence-absence surveys can be performed at a rate of about four acres/hour. However, this pace will likely be slower for the clearance survey because each tortoise burrow encountered must be excavated and when tortoises are found, they must be moved out of harm's way and monitored for a short period. As such, CMBC estimates that clearance surveys may be performed at a pace of about two acres per hour.

Installation of a tortoise-proof fence around the area of impact, with tortoise-proof gates at entry points when required, is an essential component of a tortoise removal effort. Since fence installation will need to be monitored, it would save the Proponent money to have installation occur simultaneously with the site survey, although tortoises could not be moved from the site until the perimeter fence was in place. If tortoises are inactive at the time of fence installation (which is preferred), uninhabited burrows may be excavated as they are found and potentially inhabited burrows could be flagged and excavated after the fence was installed.

2.9.2 Projected Costs.

Table 4 below identifies costs that would result with implementation of the conservation strategy:

Table 4. Projected Costs of Mitigation/Minimization Measures

| One time costs associated with minimization measures. | | | | |
|---|--|------------------|---------------------|-------------|
| Item | Description | Unit Cost | No. of Units | Cost |
| Tortoise-proof fencing for construction areas, access road and parking lot. | 8,380 linear feet of tortoise fencing @ \$3.00 per foot installed. | \$3.00 | 8,380 | \$25,140.00 |
| Authorized biologist conducting pre-construction surveys, monitoring and reporting for both phases of construction. | Fixed fee contract | \$7,500.00 | 2 | \$15,000.00 |
| Veterinary bills for injured tortoises during construction. | Allowance | \$1,500.00 | 4 | \$6,000.00 |
| Tortoise awareness program for construction workers for both phases of construction. | Development, materials and administration including signage. | \$2,500.00 | 2 | \$5,000.00 |
| Raven-proof trash containers | Rubbermaid® 50 Gallon Brute® Roll Out Containers | \$85.00 | 12 | \$1,020.00 |
| Construction of 2 culverts | 32 ' long x 30" diameter pre-cast concrete culverts installed. | \$2,000.00 | 2 | \$4,000.00 |
| | | | Subtotal | \$56,160.00 |
| | | | 10% Contingency | \$5,616.00 |
| | | | Total | \$61,776.00 |
| One time costs associated with the enhancement of the undeveloped 300 acres. | | | | |
| Item | Description | Unit Cost | No. of Units | Cost |
| Perimeter tortoise-permeable fencing on flat grades. | 10,560 ft. of 3 strand barbed wire fencing installed. | \$2.00 | 10,560 | \$21,120.00 |
| Vertical mulching in rocky and hilly areas with access to property. | 1,320 ft. of camouflage barrier (berming and/or obstructively placing large rocks/boulders). | \$1.50 | 1,320 | \$1,980.00 |
| Collection of debris from site. | Crew of 10 – Collecting 10 acre per hour – 4 days of work - \$10 per hour each. | \$800.00 | 4 | \$3,200.00 |
| Sorting of debris for re-cycling/re-purposing and disposal. | Crew of 10 – Sorting for 8 hours – 1 day of work - \$10 per hour each. | \$800.00 | 1 | \$800.00 |
| Removal of debris from site. | Large dumpster rental and removal. | \$300.00 | 10 | \$3,000.00 |
| Habitat restoration. Planting native vegetation. | Crew of 10 – 2 days of work - \$10 per hour each. | \$800.00 | 2 | \$1,600.00 |

| | | | Subtotal | \$31,700.00 |
|--|---|-------------|--------------------|---------------------|
| | | | 10% Contingency | \$3,170.00 |
| | | | Total | \$34,870.00 |
| Recurring annual costs associated with the long-term management of the undeveloped 300 acres. | | | | |
| Item | Description | Unit Cost | No. of Units | Cost |
| Authorized biologist on call, quarterly review of monitoring program and reporting. | Biologist overseeing data collection/monitoring conducted by staff and rangers and crisis response. | \$1,500.00 | 4 | \$6,000.00 |
| Permit compliance reporting. | Annual status report to USFWS and CDFG. | \$3,000.00 | 1 | \$3,000.00 |
| Fencing and vertical mulching maintenance/improvements. | 5% of cost per year | \$2,412.00 | 1 | \$2,412.00 |
| Educational materials and programs for staff and guests. | Printed materials, PSA's, signage, etc. | \$10,000.00 | 1 | \$10,000.00 |
| Addressing wildfire burning 160 acres as a changed circumstance | Replant and reseed for erosion control. 10 persons working 5 days. | \$800.00 | 5 | \$4,000.00 |
| Addressing disease outbreak | Biologist working 3 days handling 2 tortoises per day. | \$1,000 | 3 | \$3,000.00 |
| | | | Subtotal | \$28,412.00 |
| | | | 10% Contingency | \$2,841.00 |
| | | | Total | \$31,253.00 |
| | | | Grand Total | \$127,899.00 |

2.9.3 Funding Strategy.

The Proponent will be seeking third party financing for the construction of the proposed project. Precise details for the financing of the project are contingent on the project receiving full entitlement from the County of San Bernardino and is a necessary prerequisite to obtaining the financing needed to complete the project. San Bernardino County requires that the Proponent obtain the necessary Federal and State incidental take permits in order to proceed with county permit applications. Once the required permits and entitlements are secured financing can be pursued. Without this third party financing the project would not be possible and the “No Action Alternative” described below would be the only recourse available.

Preliminary projections indicate that project operations will create a cash flow sufficient to finance all costs associated with the conservation plan and its contingencies. The projected “one time minimization and enhancement costs” (\$96,646) represent less than 3% of the Phase I construction budget. Annual recurring costs (\$31,253) also represent less than 3% of the annual operating expense projections. Total implementation costs of the conservation plan (\$127,899) amount to over \$23,000 per live tortoise in year one and an additional \$5,000 annually per tortoise thereafter. On a per-live-animal basis, the projected costs associated with the conservation plan are very significant. In addition, the Proponent’s project creates positive externalities for the species and the community that cannot be quantified.

2.4.1 Funding Assurances.

The Proponent will secure a performance bond in the amount of \$130,000, underwritten by J.R. Olsen Bonds & Insurance Company (California License 0680914), for JAT Associates, for a period of 3 years or until financing has been secured, whichever occurs first (See Appendix F). With financing in place, the Joshua Tree Campground Foundation (Foundation) will be established to manage the monies set aside to fund all the costs associated with the conservation plan. The Foundation will be established through the American Endowment Foundation (AEF), <http://www.aefonline.org/>. The Foundation will receive an initial endowment of \$96,646 to fund the minimization and enhancement costs of the conservation plan. Upon completion of construction an endowment of \$31,253 will be made to the Foundation for the first year of operation. A recurring annual endowment of \$24,253 (excluding \$7,000 for the costs associated with unforeseen or changed circumstances, which were paid in the first year) will be made, for the term of the permit, to the Foundation for the maintenance costs associated with the conservation plan. Maintenance costs will become more predictable during the life of the business's operation; therefore the annual endowment may be adjusted to reflect actual costs more accurately based on known factors. If financing cannot be secured, the bond will be terminated and the "No Action Alternative" described in Section 2.9.5 below, will be pursued.

2.9.5 No Action Alternative.

Under the No Action Alternative, no permit would be issued and the campground facilities would not be built. On-going uses would continue to degrade tortoise habitats and tortoises would continue to be in harm's way from illegal activities. Dumping, shooting, recreational OHV activity, feral dogs, etc. will continue to be a problem on the site unless fencing and other protective measures are implemented, which are not envisioned without campground development. Faced with this alternative as the only option available, the Proponent would be forced to sell the property to another party to recoup expenses made to initiate development of the Campground project. The Proponent could make no guarantees as to how a new property owner would choose to develop the land. This alternative was rejected because it does not meet the Proponents project goals and will not ensure that 300 acres of potential desert tortoise habitat be preserved in perpetuity.

2.9.6 Other Alternatives Considered.

For some types of development, it is possible to choose among different sites to minimize impacts and still satisfy a proponent's development needs. In this case, the Proponent selected this site because it was in a state of decline and its development, as proposed, would allow for the construction of the project while conserving a large area of natural landscape. This situation is unique in that conservation is usually best achieved through no development. However, based on the biological, environmental and societal trends at this specific site, maintaining the status quo would gravely limit the species

chances for survival at this location and a unique conservation opportunity would be lost. The Proponent owns the lands on which campground facilities would be located. There is a good opportunity to reverse current, deleterious uses and provide safe refuge for tortoises on undeveloped portions of the site. These efforts, combined with the project's focus on the desert tortoise through education and informational materials will highlight and bring invaluable awareness to the employees, guests and the community of Joshua Tree.

3.0 CERTIFICATION

I certify that the information submitted in this application is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to suspension or revocation of this permit and to civil and criminal penalties under the laws of the State of California.

Signature

Date

4.0 LITERATURE CITED

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5.0 APPENDICES

Appendix A. Maps and figures.

Appendix B. Biological resource inventory performed by CMBC in August, 2003.

Appendix C. Guidelines for Handling Tortoise During Construction Projects

Appendix D. List of persons contacted to complete this document.

Appendix E. HCP for Federal issuance of 10(a)(1)(B) ITP.

Appendix F. Certification of Intent to Obtain Performance Bond.

Appendix A.

Maps and Figures

- Figure 1.** Joshua Tree Recreational Campground: Original Proposal (pre-Oct 2003)
- Figure 2.** Joshua Tree Recreational Campground: Revised Proposal (post-Oct 2003)
- Figure 3.** Joshua Tree Recreational Campground: Legal Description
- Figure 4.** Joshua Tree Recreational Campground: Revised Proposal (post-Aug 2004)

Appendix B.

Biological Resource Inventory Performed by CMBC in August 2003

Appendix C.

Guidelines for Handling Desert Tortoises During Construction Projects

Appendix D.

List of Persons Contacted to Complete These Documents

Brian Croft, U.S. Fish and Wildlife Service, 2493 Portola Road, Ste. B, Ventura, CA 93003. PH: (805) 644-1766. FAX: (805) 644-3958. Coordinating wildlife biologist with Service, attending meeting in August 2004 and providing miscellaneous other communications including meeting in April 2005 (Ventura).

Sharon Dougherty, Circle Mountain Biological Consultants, P.O. Box 3197, Wrightwood, CA 92397. PH/FAX: (760) 249-4948. Secondary author of this Habitat Conservation Plan and associated documents.

Judy Hohman, U.S. Fish and Wildlife Service, 2493 Portola Road, Ste. B, Ventura, CA 93003. PH: (805) 644-1766. FAX: (805) 644-3958. Involved in the Morongo Basin coordination meeting on 4 February 2004 and other various aspects of HCP completion including meeting in April 2005 (Ventura).

Becky Jones, California Department of Fish and Game, 36431 41st Street, East Palmdale, CA 93552. PH: (661) 285-5867. FAX: (661) 285-5867. October 2003, Ms. Jones met on-site with Sharon Dougherty of CMBC and Proponent, Abel Villarreal and John Simpson, to discuss impacts. Participated in meeting in August 2004 with Service (Brian Croft), CMBC (LaRue and Dougherty), Proponent (Villarreal and Simpson), and Engineer (Bill Warner).

Edward LaRue, Circle Mountain Biological Consultants, P.O. Box 3197, Wrightwood, CA 92397. PH/FAX: (760) 249-4948. Primary author of the Habitat Conservation Plan.

Jennifer Lechuga, U.S. Fish and Wildlife Service, 2493 Portola Road, Ste. B, Ventura, CA 93003. PH: (805) 644-1766. FAX: (805) 644-3958. HCP template and other documents received by CMBC from Ms. Lechuga, dated 23 August 2004. Also attended meeting in April 2005 (Ventura).

Curt Sauer, Superintendent, Joshua Tree National Park. PH: (760) 367-7511. Mr. Sauer attended regulatory meeting on 4 February 2005 to discuss HCP planning in the Morongo Basin.

John Simpson, JAT Associates, Inc., 2658 Griffith Park Blvd. #310, Los Angeles, CA 90039. PH: (323) 913-2960. Project proponent, attending meetings in October 2003, August 2004 and April 2005 (Ventura).

Abel Villarreal, JAT Associates, Inc., 2658 Griffith Park Blvd. #310, Los Angeles, CA 90039. PH: (323) 913-2960. Project proponent, attending meetings in October 2003, August 2004 and April 2005 (Ventura).

William Warner, Warner Engineering, 7245 Joshua Lane, Yucca Valley, CA 92284. PH: (760) 365-7638. FAX: (760) 365-2146. Project Engineer, attending various coordination meetings, including the one in August 2004.

Talin Yacoubian, Yacoubian Law Offices, 725 S. Figueroa St., 38th Floor, Los Angeles, CA 90017. PH: (213) 955-7145. Ms. Yacoubian spoke with CMBC personnel on several occasions to facilitate completion of the HCP and associated documents. In addition, Ms. Yacoubian served as a liaison between all participating agencies and consultants. She further participated in the April 2005 meeting (Ventura) and contributed to document revisions.

Debbie Kinsinger, Eilar Associates, 539 Encinitas Blvd., Encinitas, CA 92024. PH: (760) 753-1865. Biologist. Ms. Kinsinger was contacted to consult on final revisions of the draft HCP when, in July of 2005, the Proponent was notified that CMBC would be unable to continue work on the project for an undisclosed period of time.

Appendix E.

HCP for Federal Issuance of 10(a)(1)(B) Incidental Take Permit

Appendix F.

Certification of Intent to Obtain Performance Bond

I attest that within 60 days of receipt of the permit requested in this application, a performance bond, as described in Section 2.9.4 of this document, will be secured and a copy or proof of such will be forwarded to the Palmdale Office of the California Department of Fish & Game.

| | |
|-----------------|-----------|
| Signature | Date |
| Abel Villarreal | President |
| Name | Title |